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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,408	11/21/2003	Louis C. Cosentino	12771.1USC1	3341

7590 10/31/2006

Attention of Nicholas P. Johns  
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P.O. Box 2903  
Minneapolis, MN 55402-0903

EXAMINER

ASTORINO, MICHAEL C

ART UNIT	PAPER NUMBER
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3736

DATE MAILED: 10/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/719,408

Applicant(s)

COSENTINO ET AL.

Examiner

Michael C. Astorino

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 7/26/2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 90-117 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 90-117 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____   | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

The Examiner acknowledges the responses filed May 16, 2006 and July 26, 2006.

#### *Specification*

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which the applicant may become aware in the specification.

#### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 90-117 are rejected under 35 U.S.C. 102(e) as being anticipated by Iliff et al. US Patent Number 6,849,045.

Iliff et al. teaches a system and method for providing computerized, knowledge-based medical diagnostic and treatment advice. The medical advice is provided to the general public over networks, such as a telephone network or a computer network. The invention also includes a stand-alone embodiment that may utilize occasional connectivity to a central computer by use of a network, such as the Internet. New authoring languages, interactive voice response and speech recognition are used to enable expert and general practitioner knowledge to be encoded

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for access by the public. "Meta" functions for time-density analysis of a number of factors regarding the number of medical complaints per unit of time are an integral part of the system. A re-enter feature monitors the user's changing condition over time. A symptom severity analysis helps to respond to the changing conditions. System sensitivity factors may be changed at a global level or other levels to adjust the system advice as necessary.

Further Iliff et al. teaches in the section entitled "*XV. Physical Self Examination,*"

The MDATA system 100 is building a library of clinical sounds that allows patterns or profiles to be developed that relate the wave form of the clinical sound to the probability of a particular diagnosis. For example, the MDATA system 100 could compare the cough of a patient to the sound library to see if the cough of the patient is similar to those that eventually have been diagnosed as lung cancer.

In addition, the patient's record of the pronunciation of his or her name may be periodically recorded and compared to previous recordings. This allows the MDATA system 100 to potentially detect and evaluate the hoarseness that could be produced by a nodule on the patient's vocal cords.

A "tele-stethoscope" 780 is a device that allows the sounds a physician would hear through a stethoscope to be transmitted over the telephone. The tele-stethoscope 780 is functionally similar to that described in the 1992 Arthur D. Little report entitled "Telecommunications: Can It Help Solve America's Health Care Problems?". The tele-stethoscope 780 permits the MDATA system 100 to greatly expand the spectrum of its sound analyses to include heart murmurs, the bruits of intracranial aneurysms, breathing sounds like the wheezes of asthma and the rates of congestive heart failure, or even the bowel sounds of an intestinal obstruction.

In this pattern matching scheme, different weights are given to the different aspects of the sound depending upon which clinical sound is measured. In most sounds, the amplitude and frequency are the most important aspects. The weight or the relative importance of an aspect is different for each of various clinical sounds, such as heart murmurs, bruits, wheezes, coughs, stridor and so forth.

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When value(s) from any of the procedures 772-780 are procured by the system 100, the computer 102 moves to state 782, recites the value and requests the patient to confirm the value.

Additionally, Iliff et al. teaches in claims 1, 8 and 9:

1. A medical diagnostic system comprising: a computing environment arranged to receive patient information, comprising: a communications network; a server computer connected to the network; a client processor connected to the network and in data communication with the server computer via the network; an input device, connected to the client processor, to receive patient information from a user who is the patient or a proxy or assistant thereto; a script database; an output device, connected to the client processor, to provide information indicative of a diagnosed medical condition information; the environment executing programs for diagnosing by scoring a medical condition based on said patient information and communicating said diagnosed condition via said output device; said programs comprising: a plurality of medical complaint algorithms selectively executed based on at least a portion of the received information, wherein any one of the medical complaint algorithms scores at least a portion of the received information and diagnoses a medical condition associated with the executed medical complaint algorithm if the score reaches or passes a threshold; and wherein the program is arranged to read data from, and write data to, a medical history database stored in association with the client processor or said server computer, wherein any such scored information transferred between the client processor and the server computer is securely transmitted; and wherein each medical complaint algorithm is executed by said client processor, by a script engine program which is arranged: to interpret a medical complaint script file comprising lists of disease data, symptom data and question data; to output questions to said user; to input answers from said user via said input device; and to score said patient data and diagnose a said medical condition and update said medical history database using said scoring; and wherein said server computer is arranged to selectively download a said medical complaint script file to said client processor.

8. The system of claim 1, wherein the diagnosed medical condition is communicated to a physician.

9. The system of claim 8, wherein the score associated with the diagnosed medical condition is communicated to the physician.

### ***Response to Arguments***

Applicant's arguments with respect to pending claims have been considered but are moot in view of the new ground(s) of rejection.

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The Applicant is invited to request an interview with the Examiner.

*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Astorino whose telephone number is 571-272-4723. The examiner can normally be reached on Monday-Friday, 8:30AM to 3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on 571-272-4726. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Michael Astorino  
October 29, 2006